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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,739	12/05/2003	Eric G. Hull	427600700087	3999

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EXAMINER

RODRIGUEZ, RUTH C

ART UNIT

PAPER NUMBER

3677

DATE MAILED: 05/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/729,739

Applicant(s)

HULL ET AL.

Examiner

Ruth C. Rodriguez

Art Unit

3677

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 7-14 and 17-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19 and 26 is/are allowed.
- 6) ☒ Claim(s) 1-4, 7-14, 17-25 and 30-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 1-4, 7-14 and 17-35 are objected to because of the following informalities:
Regarding claims 1-4, 7-14 and 17-35, the phrase "ENT tube" renders the claim indefinite because the meaning of ENT is unclear. Correction is required.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

States.

3. Claims 1-4, 7-14 and 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shirogane et al. (US 5,356,181).

Shirogane discloses a fitting (3) comprises a molded plastic body (3) having an inverted generally cup-like configuration (Figs. 2 and 4-6). The body has a peripheral wall (10) and an end wall (12) forming an internal cavity having a bottom opening (Figs. 2 and 4-6) and a socket (11). The socket extends through the endwall into the cavity for receiving an end portion of a tube (12). The socket has a socket wall (11) that is

surrounded by the cavity and with the peripheral wall in outwardly-spaced relationship to the socket wall (Figs. 2 and 4-6). The socket has a longitudinal socket axis intersecting the bottom opening (Figs. 2 and 4-6). The socket wall has a generally cylindrical entrance portion extending over a portion of the axial length of the socket (Figs. 2 and 4-6). The socket wall has a plurality of circumferentially-spaced resilient fingers (13a) extending from the generally cylindrical entrance portion over the remaining length of the socket wall (Figs. 2 and 4-6). The fingers terminal ends are spaced from the bottom opening (Figs. 2 and 4-6). The cavity, the socket and the peripheral wall are configured to provide insertion of the tube into and through the socket past the finger terminal ends into engagement with a support surface that covers the bottom opening (Figs. 2 and 4-6). Shirogane fails to disclose the fitting has a flange. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have an attachment flange having a plurality of fastener receiving holes that extends outwardly from the body wall around the bottom opening with a plane outer surface that is at one terminal end of the fitting and the end wall is at generally opposite terminal end of the fitting so that the plane outer surface of the attachment flange is positioned against a plane support surface for attaching the fitting to a support surface since the Examiner takes Official Notice that the use of a flange in combination with a fitting for coupling tubes is well known in the art to allow secure attachment of the fitting to a supporting surface or to another fitting having a flange instead of being connected to another pipe or tube without a flange.

Shirogane also discloses that:

- The fingers are more than three in number and include at least one generally opposed pair of the fingers having radially inwardly extending teeth (13a) thereon adjacent the terminal ends thereof (Figs. 2 and 4-6).
- The teeth are spaced toward the socket entrance opening from the finger terminal ends (Figs. 2 and 4-6).
- The teeth have smoothly rounded tooth end portions facing toward the socket axis (Figs. 2 and 4-6).
- The bottom opening is circular and has a central axis (Figs. 2 and 4-6). The peripheral wall has a generally frustoconical shape and the socket axis being generally coincidental with the central axis of the bottom opening (Figs. 2 and 4-6).
- The fingers are more than three in number and are separated by generally V-shaped spaces that increase in width from the generally cylindrical entrance portion to the finger terminal ends so that the fingers gradually decrease in circumferential width in a direction from the generally cylindrical entrance portion to the finger terminal ends (Figs. 2 and 4-6).
- The end wall is generally flat (Figs. 2 and 4-6).
- The fingers are more than three in number and only two generally opposed ones of the fingers have radially inwardly extending teeth thereon adjacent the finger terminal ends (Figs. 2 and 4-6).

Shirogane fails to disclose that the socket axis extends at an angle of 45 degrees to the plane of the flange plane outer surface. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have the

socket axis extending at an angle of 45 degrees to the plane of the flange plane outer surface since the Examiner takes Official Notice that the use of fittings where the socket axis extends at an angle of 45 degrees to the plane of the flange plane outer surface is well known in the art in order to change the direction of the tube when an obstruction is encountered or where space is limited. Especially since a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

Regarding claim 12, claim 12 can be rejected by using a combination of the rejection of claims 1 and 7 that will provide the same limitations being recited by claim 12.

Regarding claim 19, claim 19 can be rejected by using a combination of the rejection of claims 1 and 8 that will provide the same limitations being recited by claim 19 since the 45 degrees is equivalent to the inclination with respect to the plane.

Allowable Subject Matter

4. Claims 26-35 allowed.

Response to Arguments

5. Applicant's arguments with respect to claims 1-4, 7-14 and 17-25 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gruber et al. (US 5,112,086), Shirogane et al. (US 5,356,181), Gerich (US 6,199,918) and Hardic et al. (US 2003/0155767) are cited to show state of the art with respect to fittings having similar limitations to those being claimed by the current application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruth C Rodriguez whose telephone number is (571) 272-7070. The examiner can normally be reached on M-F 07:15 - 15:45.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J. Swann can be reached on (571) 272-7075.

Submissions of your responses by facsimile transmission are encouraged. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-6640.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

Ruth C. Rodriguez
Patent Examiner
Art Unit 3677

rcr
April 30, 2006


ROBERT J. SANDY
PRIMARY EXAMINER